

SEQUENCE LISTING

<110> Max-Delbruck-Centrum fur Molekulare Medizin

 $<\!120\!>\,$ Novel Sequence Variants of the Human Beta 2-Adrenergic Receptor Gene and Use Thereof

<130> 101195-2

<140> US 09/582,719

<141> 2000-06-29

<150> PCT/DE98/03818

<151> 1998-12-30

<150> DE 197 58 401.2

<151> 1997-12-30

<160> 23

<170> PatentIn version 3.1

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MAY 0 9 2003

TECH CENTER 1600/2900

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<223> variant of the human beta2-adrenergic receptor gene with mutation
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tm)

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<213> human genomic clone

<220>

<221> mutation

<222> (1)..(3451)

<223> variant of the human beta2-adrenergic receptor gene with mutation
 s in positions 1541, 1568, 1633, 1666

3 cont

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ont le

ggtactgtgc ctagcgataa cattgattca caagggagga attgtagtac aaatgactca 2820 ctgctataaa gcagtttttc tacttttaaa gaccccccc ccccaacag aacactaaac 2880 agactattta acttgagggt aataaactta gaataaaatt gtaaaaattg tatagagata 2940 tgcagaagga agggcatcct tctgcctttt ttatttttt aagctgtaaa aagagagaaa 3000 3060 aagtttatgt ctaaagagct ttagtcctag aggacctgag tctgctatat tttcatgact 3120 tttccatgta tctacctcac tattcaagta ttaggggtaa tatattgctg ctggtaattt 3180 gtatctgaag gagattttcc ttcctacacc cttggacttg aggattttga gtatctcgga 3240 cctttcagct gtgaacatgg actcttcccc cactcctctt atttgctcac acggggtatt 3300 ttaggcaggg atttgaggag cagcttcagt tgttttcccg agcaaaggtc taaagtttac 3360 agtaaataaa atgtttgacc atgccttcat tgcacctgtt tgtccaaaac cccttgactg 3420 gagtgctgtt gcctccccca ctggaaaccg c 3451

Cons

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<211> 3451

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<213> human genomic clone

<220>

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<223> variant of the human beta2-adrenergic receptor gene with mutation
s in positions 1541, 1568, 1633, 1666

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tgaaccatat gaatttgeea ttttggtaag teacagaege cagatggtgg caattteaca 240
tggeacaace egaaagatta acaaactate eageagatga aaggatttt tttagttea 300

ttgggtttac tgaagaaatt gtttgaattc tcattgcatc tccagttcaa cagataatga 360 420 cacacaactt tetetetetg teccaaaata cataettgea taceeeget eeagataaaa 480 tccaaagggt aaaactgtct tcatgcctgc aaattcctaa ggagggcacc taaagtactt 540 gacagegagt gtgctgagga aateggeage tgttgaagte aceteetgtg etettgeeaa 600 660 gctcgggtga ggcaagttcg gagtacccag atggagacat ccgtgtctgt gtcgctctgg 720 atgeeteeaa geeagegtgt gtttaettte tgtgtgtgte accatgtett tgtgettetg 780 ggtgcttctg tgtttgtttc tggccgcgtt tctgtgttgg acaggggtga ctttgtgccg 840 gatggcttct gtgtgagagc gcgcgcgagt gtgcatgtcg gtgagctggg agggtgtgtc 900 tcagtgtcta tggctgtggt tcggtataag tctgagcatg tctgccaggg tgtatttgtg 960 cctgtatgtg cgtgcctcgg tgggcactct cgtttccttc cgaatgtggg gcagtgccgg 1020 tgtgctgccc tctgccttga gacctcaagc cgcgcaggcg cccagggcag gcaggtagcg 1080 gccacagaag agccaaaagc tcccgggttg gctggtaagg acaccacctc cagctttagc 1140 cctctggggc cagccagggt agccgggaag cagtggtggc ccgcctcca gggagcagtt 1200 gggccccgcc cgggccagcc ccaggagaag gagggcgagg ggaggggagg gaaaggggag 1260 gagtgcctcg ccccttcgcg gctgccggcg tgccattggc cgaaagttcc cgtacgtcac 1320 ggcgagggca gttcccctaa agtcctgtgc acataacggg cagaacgcac tgcgaagcgg 1380 cttcttcaga gcacgggctg gaactggcag gcaccgcgag cccctagcac ccgacaagct 1440 gagtgtgcag gacgagtccc caccacaccc acaccacagc cgctgaatga ggcttccagg 1500 cgtccgctcg cggcccgcag agccccgccg tgggtccgcc tgctgaggcg cccccagcca 1560 gtgcgcttac ctgccagact gcgcgccatg gggcaacccg ggaacggcag cgccttcttg 1620 ctggcaccca atggaagcca tgcgccggac cacgacgtca cgcagcaaag ggacgaggtg 1680 tgggtggtgg gcatgggcat cgtcatgtct ctcatcgtcc tggccatcgt gtttggcaat 1740 gtgctggtca tcacagccat tgccaagttc gagcgtctgc agacggtcac caactacttc 1800 atcacttcac tggcctgtgc tgatctggtc atgggcctgg cagtggtgcc ctttggggcc 1860 gcccatattc ttatgaaaat gtggactttt ggcaacttct ggtgcgagtt ttggacttcc 1920 attgatgtgc tgtgcgtcac ggccagcatt gagaccctgt gcgtgatcgc agtggatcgc 1980 tactttgcca ttacttcacc tttcaagtac cagagcctgc tgaccaagaa taaggcccgg 2040

Cons

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<211> 27

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<223> primer ADRBR-F1 for amplification of fragment I
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<213> Artificial
<220>
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<222> (1)..(23)
<223> primer ADRBR-R1 for amplification of fragment I
<400> 9
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<210> 13

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<222> (1)..(20)
<223> primer ADRBR-F4 for amplification of fragment IV
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 <222> (1)..(22)
 <223> primer ADRBR-F7 for amplification of fragment VII
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 <210> 19
<211> 23
<212> DNA
<213> Artificial
<220>
<221> primer_bind
<222> (1)..(23)
<223> primer ADRBR-R7 for amplification of fragment VII
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<211> 17

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 <220>
 <221> primer_bind
 <222> (1)..(17)
 <223> primer ADRBR-F5 for amplification of fragment \ensuremath{\text{V}}
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 <210> 21
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 <212> DNA
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<220>
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<222> (1)..(18)
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gtagaaggac acgatgga
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<220>
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<222> (1)..(22)
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<223> primer ADRBR-R6 for amplification of fragment VI

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22

<210> 23

<211> 26

<212> DNA

<213> Artificial

<220>

<221> primer_bind

<222> (1)..(26)

<223> primer ADRBR-R6 for amplification of fragment VI

<400> 23 aaatctgggc tccggcagta gataag

26